

**Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress**

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<b>In the Matter of</b>	)	
	)	<b>Docket No. 16–CRB–0003–PR (2018–</b>
	)	<b>2022) (Remand)</b>
<b>DETERMINATION OF RATES AND</b>	)	
<b>TERMS FOR MAKING AND</b>	)	
<b>DISTRIBUTING PHONORECORDS</b>	)	
<b>(PHONORECORDS III)</b>	)	

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**WRITTEN SECOND SUPPLEMENTAL REMAND TESTIMONY OF LESLIE M. MARX, PHD**

**JANUARY 24, 2022**

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## I. Scope of charge and overview of report

- (1) I have been asked to review and respond to the December 9, 2021 and January 6, 2022 Orders by the Copyright Royalty Board (“CRB”).<sup>1</sup> My responses are contained in this testimony. The materials upon which I relied in forming the opinions expressed herein are cited throughout this testimony.
- (2) The Judges propose both an algorithm for determining a headline percentage-of-revenue rate level and a rate structure consisting of the headline rate along with the mechanical-only floors defined in the Phonorecords III Final Determination.<sup>2</sup> They request feedback on their algorithm, on possible inputs into their algorithm, and on their proposed rate structure.<sup>3</sup>
- (3) In Section II of this report, I discuss the Judges’ rate-setting algorithm and their request for inputs along with the examples they provide. In Section III, I provide the Judges with inputs to their algorithm based on their examples and what I understand to be goal of the Judges—to identify the percentage of total services revenues that “the Majors agreed to allow the interactive service sector to retain” so that they can “survive.”<sup>4</sup> In Section IV, I provide

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<sup>1</sup> Notice and Sua Sponte Order Directing the Parties to Provide Additional Materials, *In re: Determination of Royalty Rates and Terms for Making and Distributing Phonorecords (Phonorecords III)*, Docket No. 16-CRB-0003-PR (2018–2022) (Remand), December 9, 2021 [hereinafter, “December 9, 2021 Order”]; Order Granting in Part and Denying in Part Copyright Owners’ Motion for Reconsideration or, in the Alternative, Clarification (Restricted), *In re: Determination of Royalty Rates and Terms for Making and Distributing Phonorecords (Phonorecords III)*, Docket No. 16-CRB-0003-PR (2018–2022) (Remand), January 6, 2022 [hereinafter, “January 6, 2022 Order”].

<sup>2</sup> Final Determination, *In re: Determination of Royalty Rates and Terms for Making and Distributing Phonorecords (Phonorecords III)*, Docket No. 16-CRB-0003-PR (2018–2022) (CRB November 5, 2018) [hereinafter, “Phonorecords III Final Determination”], at 71–75.

<sup>3</sup> The Judges invite submissions on “the percent of royalties the Majors allow the interactive service sector to retain” as an input into their calculations, in light of the fact that “the extant record contains evidence and testimony that may support a range of various potential findings as to the percent of royalties the Majors allow the interactive service sector to retain.” December 9, 2021 Order, at 2. The Judges also note that the parties may challenge any element of the rate or rate structure they propose: “more particularly, but without limitation, the parties may challenge any assumptions (express or implied), data, testimony, other evidence or legal bases they believe to be relevant to the rate and rate structure approach the judges have described herein.” December 9, 2021 Order, at 4.

<sup>4</sup> December 9, 2021 Order, at 2–3 and fn. 2.

additional discussion of some of the difficulties with the proposed rate-setting algorithm and approach. In Section V, I discuss potential modifications to the algorithm that address some of these concerns. In Section VI, I discuss the Judges' proposed rate structure.

## II. The Judges' rate-setting algorithm and inputs

- (4) The Judges' rate-setting algorithm takes as a starting point the percentage of revenue that the Services' are "allowed to retain" by the major record companies to ensure their continued survival.<sup>5</sup> The balance of the Services' revenue above this "survival rate" is then divided between sound recording and musical works rightsholders according to the 3.82-to-1 ratio identified in the Phonorecords III Final Determination.<sup>6</sup> The resulting musical works royalty rate becomes the headline percentage-of-revenue royalty rate under the Judges' proposal.
- (5) The Judges provide examples of inputs that might be plugged in to this algorithm in their orders. These are listed in Figure 1, along with some information about the sources of the inputs.

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<sup>5</sup> December 9, 2021 Order, at 2.

<sup>6</sup> December 9, 2021 Order, at 1–4. The 3.82-to-1 ratio is derived by starting with the [REDACTED] ratio taken from Professor Gans' Shapley-inspired model and then adjusting it so that when the ratio is applied to the assumed all-in royalty rate of [REDACTED], the resulting musical works rate equals the musical works royalty rate from the Majority's model: 15.1%. The 15.1% was derived by the Majority by multiplying the all-in royalty rate of [REDACTED] derived from one Marx Shapley model by the [REDACTED] ratio used in the Gans Shapley-inspired model. Phonorecords III Final Determination, at 71–72.

Sources: December 9, 2021 Order at 2–3 and fn. 2; Written Direct Testimony of [REDACTED], October 31, 2016, ¶ 29; Written Rebuttal Testimony of Richard Watt (Ph.D.), February 13, 2017 [hereinafter, “Watt WRT”], ¶ 34; Expert Report of Jeffrey A. Eisenach, Ph.D., October 31, 2016 [hereinafter, “Eisenach WDT”], ¶¶ 169, 171.

1. “[A] review of license agreements for sound recordings between labels and interactive services demonstrates that, while there is variability in the payment terms across services and labels, it is standard for label licenses to include a royalty prong of approximately [REDACTED] of service revenue for the sound recording license. This standard term is borne out by actual payments.” Eisenach WDT. ¶ 169

2. Dr. Eisenach mentions “the industry standard that approximately 70 percent of service revenue is allocated to rightsholders” without citation. Eisenach WDT, ¶ 171.

3. The January 6, 2022 Order mistakenly reports the all-in musical works rate associated with Professor Watt's [REDACTED] % as [REDACTED] %. January 6, 2022 Order, at 10. The correct number, applying the algorithm in the Working Proposal, is [REDACTED] %.

(6) These inputs fall into three general categories:

1. What the Services “should” get in a fair allocation, according to a Shapley model (row 2 in Figure 1, based on Professor Watt’s Shapley analysis);
2. What the Services actually pay in royalties, with the assumption that these payments demonstrate their “survival rate” (rows 3 through 5 in Figure 1, based on observations of actual royalty rates);
3. Financial information that may directly reflect the Services’ “survival rate” (rows 1 and 6 in Figure 1).

- (7) Each of these types of inputs has a different implication for what the algorithm will produce and relies on different assumptions. I discuss each in turn.
- (8) Rate derived from Shapley: If the Judges' goal is to look to market-based evidence to determine the Services' survival rate, then it is not clear why they would consider results from a Shapley model. As I discussed in my original testimony, the Shapley model, when appropriately implemented, can "provide insights about the directional change for fair royalty rates relative to current values."<sup>7</sup> But the rates that emerge from a Shapley analysis are not market rates, competitive or otherwise.
- (9) Observed rates: The Judges' view that observed total royalty rates reflect what the major record labels allow the Services to retain in order to survive embeds an assumption of a one-to-one see-saw. Because the Judges' rate-setting algorithm takes the total observed royalty as a given, and then redistributes that total royalty between the sound recording and musical works rightsholders, their algorithm assumes that if musical works rates change, then the labels will perfectly adjust their rates to maintain the survival royalty rate.<sup>8</sup> I have already discussed in this remand proceeding the theoretical and empirical evidence against a one-to-one see-saw.<sup>9</sup> In addition, because the Phonorecords III rates are now effectively being set retroactively, there is little reason to expect a one-to-one or near one-to-one see-saw to operate in this context. I discuss in more detail in Section IV the problems with assuming a one-to-one or near one-to-one see-saw.

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<sup>7</sup> Written Direct Testimony of Leslie M. Marx, PhD, November 1, 2016 [hereinafter, "Marx WDT"], ¶ 139.

<sup>8</sup> If, in contrast, sound recording rates do not perfectly adjust, then musical works rate increases risk pushing Services below their survival rate.

<sup>9</sup> Written Direct Remand Testimony of Leslie M. Marx, PhD, April 1, 2021 [hereinafter, "Marx WDRT"], § V.A.

Written Second Supplemental Remand Testimony of Leslie M. Marx, PhD, Docket No. 16-CRB-0003-PR (2018–2022) (Remand)

- (10) Financial data: Using historical financial data to precisely infer a survival rate from which to derive royalty rates is a difficult task. It is not straightforward to allocate costs across regions or across products, it is not clear what measure of accounting profits corresponds to long-term survival, and the rate that would bring an individual service to any particular accounting measure of profits could vary significantly over time and across services. If forecasts are used, as is the case here,<sup>10</sup> then red flags are raised regarding the reliability of calculations based on those forecasts if the forecasts are subsequently revealed to have been incorrect.<sup>11</sup> Finally, if a “survival rate” derived from financial data differs from one derived from observed royalty rates, then the hypothesized one-to-one see-saw is, in practice, not operating because that would mean that labels are either leaving money on the table or over-taxing the Services, perhaps related to their being complementary oligopolists.

### III. Potential alternative inputs

- (11) In later sections, I discuss concerns regarding the Judges’ approach and propose possible alternative approaches. Here, I provide inputs from the record that provide the types of information that the Judges seem to be requesting, but that are better tied to the underlying concepts than the example inputs that the Judges provide. Figure 2 lists those rates, their sources, and the all-in musical works royalty rates that they imply when they are used as

<sup>10</sup> January 6, 2022 Order, at 10 (“Professor Watt also cites [REDACTED] financial data that he understood to indicate that music services’ non-content costs would fall to [REDACTED] % of ‘Service Revenue’ during the Phonorecords III rate period.”). Professor Watt cites [REDACTED]

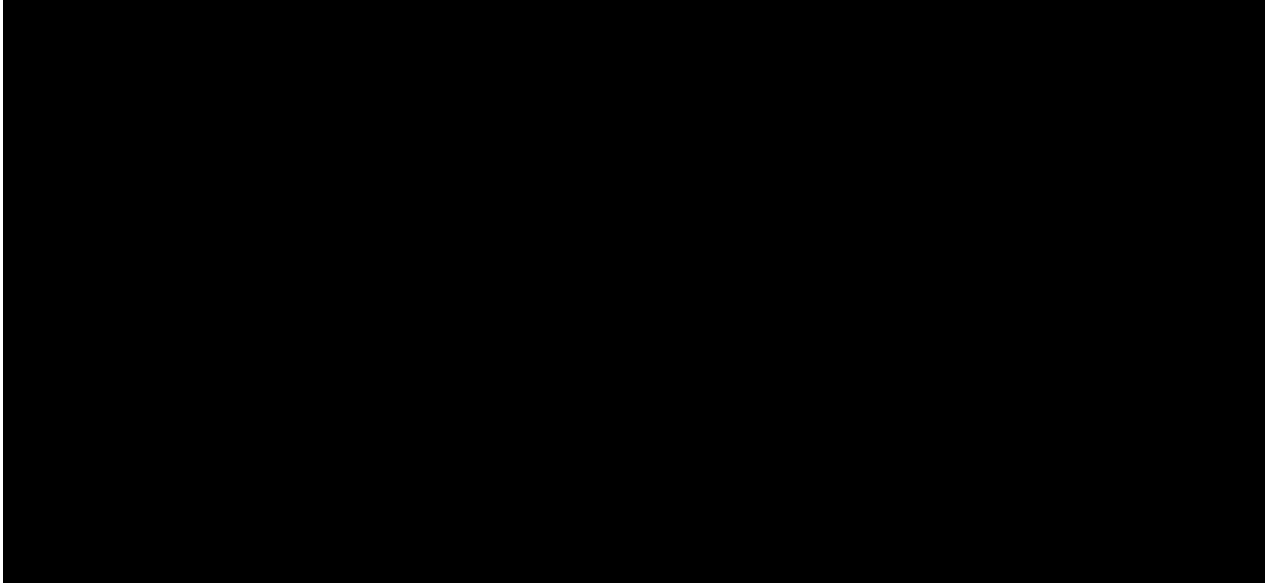
[REDACTED] Watt WRT, ¶33 n. 21.

<sup>11</sup> [REDACTED]

[REDACTED] Watt WRT, ¶33 n. 21. [REDACTED]

inputs into the Judges' algorithm. In the discussion that follows, I provide additional context and reasoning for why I selected the inputs listed in Figure 2.

**Figure 2. [RESTRICTED] Potential royalty rate inputs**



- (12) As noted above, Shapley values are not market rates and, accordingly, do not inform the question of what the major labels have determined that they need to leave the Services in order for the Services to survive. But, if the Judges are interested in using Shapley-based rates in their algorithm, a figure grounded in the Judges' prior analysis is the [REDACTED] % total royalty figure that formed part of the basis for their rate calculations in the Phonorecords III proceeding.<sup>12</sup> In contrast, the 67% that they point to from Professor Watt's Shapley model (row 2 of Figure 1) came from a model they had criticized and chose not to use in their royalty rate calculations.<sup>13</sup> The [REDACTED] % number yields an [REDACTED] % all-in musical works rate according to the Judges' algorithm, as shown in row 1 of Figure 2. A remaining problem with

<sup>12</sup> Phonorecords III Final Determination, at 75.

<sup>13</sup> January 6, 2022 Order, at 9; Watt WRT, ¶ 34; Phonorecords III Final Determination, at 75 ("The Judges give Professor Watt's 1.3:1 ratio no weight.").



this calculation, as I explained in my Written Direct Remand Testimony in this proceeding, is that it does not take into account the fact that sound recording rightsholders in reality receive more than what the Shapley value assigns to them, which distorts what the Services and Copyright Owners retain.<sup>14</sup> In that report, I outlined a way to solve this “imbalance problem.”<sup>15</sup> I describe that approach in more detail in this context and use it to adjust all-in musical works royalty rates in Section V.A below.

- (13) If the Judges are interested in using financial data along the lines of that used by Professor Watt to calculate a “survival rate,” more accurate financial data are available. While the Judges point to a [REDACTED] [REDACTED] that Professor Watt used as part of his Shapley analysis in his 2017 Written Rebuttal Testimony,<sup>16</sup> as mentioned above (see footnote 11), [REDACTED] [REDACTED].<sup>17</sup> The actual [REDACTED] [REDACTED]<sup>18</sup> This figure yields an all-in musical works rate of [REDACTED] % of revenue, as shown in row 2 of Figure 2.

- (14) If the Judges alternatively are interested in using observed total royalty rates as inputs into their calculation, then Figure 2 provides in rows 3 through 6 a series of rates that are observed in the market and that might be used as inputs into the Judges’ algorithm. These

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<sup>14</sup> Marx WDRT, § VI.A.

<sup>15</sup> Marx WDRT, § VI.B.

<sup>16</sup> December 9, 2021 Order, at 3; Watt WRT, ¶33 n. 21.

<sup>17</sup> [REDACTED]

<sup>18</sup> [REDACTED]

data seem to best address what the Judges appear to be looking for, namely “the percent of royalties the Majors allow the interactive service sector to retain.”<sup>19</sup> Here I discuss the relative merits of the various figures included in rows 3 through 6 in Figure 2 and explain why these are preferable to the other observed total royalty rates that the Judges referenced in their prior orders.

- (15) Because contracts are long-term and not renegotiated continuously, and because market parameters are constantly moving, even if one thought that a “survival rate” for a service could be derived from observed market rates, one could only rely on observed market rates being close to that service’s survival rate at the time that the service’s sound recording contract is being negotiated. Given that, a logical set of rates to consider for a “survival rate” are the musical works rates at the time of the renegotiations with the major labels and the sound recording rates that immediately followed. Rows 3 through 6 in Figure 2 show

[REDACTED]

[REDACTED] and the sound recording rates that [REDACTED]. I focus on [REDACTED]

because: (i) [REDACTED]; (ii) [REDACTED]

[REDACTED]; (iii) [REDACTED]

[REDACTED].<sup>20</sup>

<sup>19</sup> December 9, 2021 Order, at 2.

<sup>20</sup> See, e.g., Phonorecords III Final Determination, at 72 (“The final column [of implied musical work and sound recording royalty rate tables] shows the rates yielded by applying the [various experts’ sound recording to musical works] ratios to [REDACTED]”); Phonorecords III Final Determination, at 73 (“Using [REDACTED] as an example, however, actual combined royalties for musical works and sound recordings are approximately [REDACTED] % of revenue. [...] The Judges find that the problem of, in essence, importing complementary oligopoly profits into the musical works rate through a TCC percentage can be avoided by reducing the TCC percentage. Specifically, the TCC percentage should be reduced to a level that produces the same (non-complementary-oligopoly) percentage revenue rate when applied to the existing [REDACTED] % combined royalty as the Shapley-produced TCC percentage. yields when applied to the theoretical combined royalties in the model.”); January 6, 2022 Order, at 9 (citing Eisenach WRT that “interactive streaming services, such as [REDACTED], enjoy a standard split of revenues — roughly 70/30 in favor of copyright owners”); January 6, 2022 Order, at 10 (“Professor Watt also cites [REDACTED] that he understood to indicate that music

- (16) Rows 3 through 6 in Figure 2 differ in whether they examine headline or effective rates.

Headline sound recording rates are informative because they capture in a straightforward way what a label was asking for at the time the contract was negotiated. According to the logic behind the Judges' algorithm, that is informative of their expectations of a service's "survival rate." Because a label will not have complete foresight into exactly how all of the moving pieces of the contracts will play out, effective rates will be at least somewhat unknown at the time the agreement is negotiated. Nevertheless, resulting effective rates can also be informative as to expectations of rates at the time of negotiations, depending on how much insight the record label had into how the various contractual terms would play out. A label would likely have better insight into effective sound recording rates than effective musical works rates because the latter are based on data that are likely more opaque to them, and so I focus primarily on headline musical works rates. However, for completeness, I include both headline and effective musical works royalty rates in Figure 2.

- (17) [REDACTED]<sup>21</sup> [REDACTED]  
[REDACTED]. Those sound recording  
contracts [REDACTED]<sup>22</sup> [REDACTED] effective

services' non-content costs would fall to [REDACTED] of 'Service Revenue' during the Phonorecords III rate period. [...] On the Services' side [REDACTED]").

21 [REDACTED]

22 [REDACTED]

sound recording rate paid to the major labels [REDACTED]

[REDACTED], was [REDACTED]%.<sup>23</sup>

- (18) On the musical works side, the headline rate in [REDACTED] was 10.5%, while the [REDACTED] [REDACTED] % ([REDACTED] [REDACTED]).
- (19) These alternative rate measures yield total royalty rates ranging from [REDACTED] % to [REDACTED] %, with resulting all-in musical works rates according to the Judges' algorithm ranging from [REDACTED] % to [REDACTED] %, as shown in rows 3 through 6 of Figure 2. It is important to note, as I discuss in Section IV below, that these rates are all calculated according to an algorithm that is in tension with the 801(b)(1) factors. The bottom end of the range of rates is closest to rates that I found to be consistent with the 801(b)(1) factors in my Written Direct Testimony in this proceeding.<sup>24</sup> Accordingly, if the Judges use their new rate-setting algorithm without adjustment, it is my opinion that they should use the [REDACTED] % total royalty rate as the input into

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<sup>24</sup> Marx WDT, ¶ 165 (“I conclude, based on an economic interpretation of the 801(b) factors, that mechanical royalty rates should decrease, yielding reasonable total musical works rates in a range of 7.7% to 10.5%”).

their algorithm (the rate that comes from combining the [REDACTED] sound recording and headline musical works rates), resulting in an all-in musical works royalty of [REDACTED] %.

#### IV. Concerns with the rate-setting algorithm

- (20) The 801(b)(1) factors are not focused on survival, but rather on interactive streaming services and publishers being rewarded for their relative contributions and earning “fair” incomes and returns, presumably above the rates that would just allow them to survive.<sup>25</sup> Thus, either assuming or moving in the direction of an outcome in which the Services retain only their “survival rate” is inherently in tension with the 801(b)(1) factors.
- (21) Further, because the Judges’ rate-setting algorithm embeds an assumption of a one-to-one see-saw, it is contrary to the goals of the 801(b)(1) factors and indeed the entire notion of CRB oversight of royalty rates.<sup>26</sup> The Judges’ Working Proposal assumes that, whatever the level of musical works royalties, the Services will ultimately retain only their survival rate, and labels will capture the residual.<sup>27</sup> In other words, this approach assumes that sound

<sup>25</sup> In this report, I sometimes use the word “publishers” to refer to musical works copyright holders more generally.

<sup>26</sup> Absent this proceeding or other regulation, there is no reason to expect that negotiations between Copyright Owners and Services would deliver rates that are reasonable and satisfy the 801(b)(1) factors. Unregulated negotiations cannot be relied upon because of the consolidation of rights to a large number of individual musical works by a small number of publishers, the must-have nature of their catalogs, their resulting complementary oligopoly power, their connections with major record labels who themselves have must-have catalogs and complementary oligopoly power, and the extensive split-ownership of musical works copyrights, which increases the number of rights holders that have veto power over an individual musical work. These forces suggest that unregulated rates would be higher than those satisfying the 801(b)(1) factors, which in turn suggests that the CRB’s role is largely to constrain the exercise of market power over mechanical royalties, as the ASCAP and BMI “rate courts” similarly do for musical works performance royalties. *See, e.g., United States v. ASCAP (In re Application of RealNetworks, Inc.)*, 627 F.3d 64, 76 (2d Cir. 2010) (“Fundamental to the concept of ‘reasonableness’ is a determination of what an applicant would pay in a competitive market. . . .”); *See also United States v. ASCAP (In re Application of Buffalo Broad. Co., Inc.)*, No. 13-95 (WCC), 1993 WL 60687, at \*16 (S.D.N.Y. Mar. 1, 1993) (“[T]he rate court must concern itself principally with ‘defin[ing] a rate . . . that approximates the rates that would be set in a competitive market.’”).

<sup>27</sup> To see how this is the case, consider the example used by the Judges in their December 9, 2021 Order. That Order contemplates a sound recording rate of 57% and a musical works rate of 11%, for a total rate of 68%. The Judges then apply their preferred ratio to the 68%, resulting in a new musical works rate of 14.1% and a new sound recording rate of 53.9%, yielding the same combined total royalty rate, just with a transfer of some of the royalty from the sound recording rightsholders to the Copyright Owners. December 9, 2021 Order ¶ 7.

recording rates will ultimately decline by exactly the amount that musical works rates go up. But if, in reality, sound recording rightsholders do not reduce their royalties to fully offset an increase in musical works rates, then the Services will be made even worse off than they were previously, potentially leaving them with even less than their “survival rate.” That result is in tension with the Section 801(b)(1) factors, which call for, among other things, royalties that afford Services a fair income and reflect the Services’ “technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication.”<sup>28</sup>

- (22) The problems with a one-to-one see-saw assumption have been discussed at length in this proceeding. I will not repeat them in detail here, but instead I emphasize a few points. First, even the Copyright Owners’ experts do not claim that the see-saw is one-to-one—Professor Watt estimated a see-saw of █%, derived from a flawed model.<sup>29</sup> Second, the largely historical-looking nature of the rates that will ultimately be set in this proceeding points to a 0% see-saw as most relevant in this context—sound recording rates for the Phonorecords III period have already been negotiated and have largely already been paid. Third, the hypothesized theoretical see-saw mechanism does not take into account real-world phenomena, such as multiple overlapping long-term contracts between multiple Services and multiple record labels, each of whom has incomplete information regarding the others.

<sup>28</sup> The four 801(b)(1) factors are: “(A) To maximize the availability of creative works to the public. (B) To afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions. (C) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication. (D) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices.” 17 U.S.C. § 801(b)(1) (2004).

<sup>29</sup> CO EX R.-110, at 12; Marx WDRT, § V.A.

Fourth, a one-to-one see-saw effect is [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]<sup>30</sup>

Finally, a one-to-one see-saw is at odds with reality in that the Services obviously are heavily invested in the outcome of this proceeding, but they would be indifferent if there were a one-to-one see-saw effect because then any profitability gained (or lost) from a musical works royalty rate change would be precisely offset through the corresponding sound recording royalty rate change in the opposite direction.

## **V. Alternative approaches that are more consistent with the 801(b)(1) factors**

- (23) In this proceeding, I have found in prior analysis that rates consistent with the 801(b)(1) factors are lower than the rates that were in effect under Phonorecords II.<sup>31</sup> In light of this, despite my concerns with the Judges' proposed rate-setting algorithm, I consider the rates shown in Figure 2 above (and also in Figure 3 and Figure 4 below) to be more in line with the 801(b)(1) factors than the rates in the Phonorecords III Final Determination.
- (24) Further, given that the Phonorecords II rates are closer to rates that are consistent with the 801(b)(1) factors as determined by my analyses than either the Phonorecords III rates from the Final Determination or the range of rates that result from the Working Proposal combined with the inputs in Figure 2, an option that is more consistent with the 801(b)(1) factors would

<sup>30</sup> See, e.g., Marx WDR, ¶ 51; Written Supplemental Remand Testimony of Leslie M. Marx, PhD, November 15, 2021, ¶ 24; [REDACTED]

<sup>31</sup> Marx WDT, ¶ 165 ("I conclude, based on an economic interpretation of the 801(b) factors, that mechanical royalty rates should decrease, yielding reasonable total musical works rates in a range of 7.7% to 10.5%.")

be to revert to the Phonorecords II rates. That being said, if the Judges are inclined to use a rate-setting algorithm along the lines of what is contained in the Working Proposal, certain improvements can be made so that the resulting rates better satisfy the governing rate-setting standard. As noted above, the rate-setting algorithm included in the Working Proposal is problematic because it assumes the Services retain only their “survival” rate and, as a result, it does not reward the Services for their “relative contributions” or leave them with a “fair income.” In addition, it is problematic because it assumes a one-to-one see-saw effect. Below I present two alternative calculations inspired by the Judges’ Working Proposal that address some of these issues.

### **V.A. Alternative 1: correcting the imbalance problem**

- (25) The Majority’s model in the Phonorecords III Final Determination included a “fair” return for the Services of █% and a “fair” return for the Copyright Owners of █%.<sup>32</sup> These “fair” returns both come directly out of the model used by the Majority in the Final Determination to derive musical works royalty rates.<sup>33</sup>
- (26) Given that the supracompetitive rates charged by sound recording rights holders exceed █% (the residual available after █% is allocated to interactive streaming services and █% to musical works rights holders),<sup>34</sup> a problem with simply allocating █% to the interactive streaming services is that musical works rights holders would receive less than

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<sup>32</sup> Phonorecords III Final Determination, at 75, 87 (“The Judges find that these rates are consistent with the experts’ analyses and constitute a fair allocation of revenue between copyright owners and services.”).

<sup>33</sup> Phonorecords III Final Determination, at 87, fn. 130.

<sup>34</sup> █.



their “fair” return; analogously, simply allocating █% to the musical works rights holders would leave the Services with less than their “fair” return.

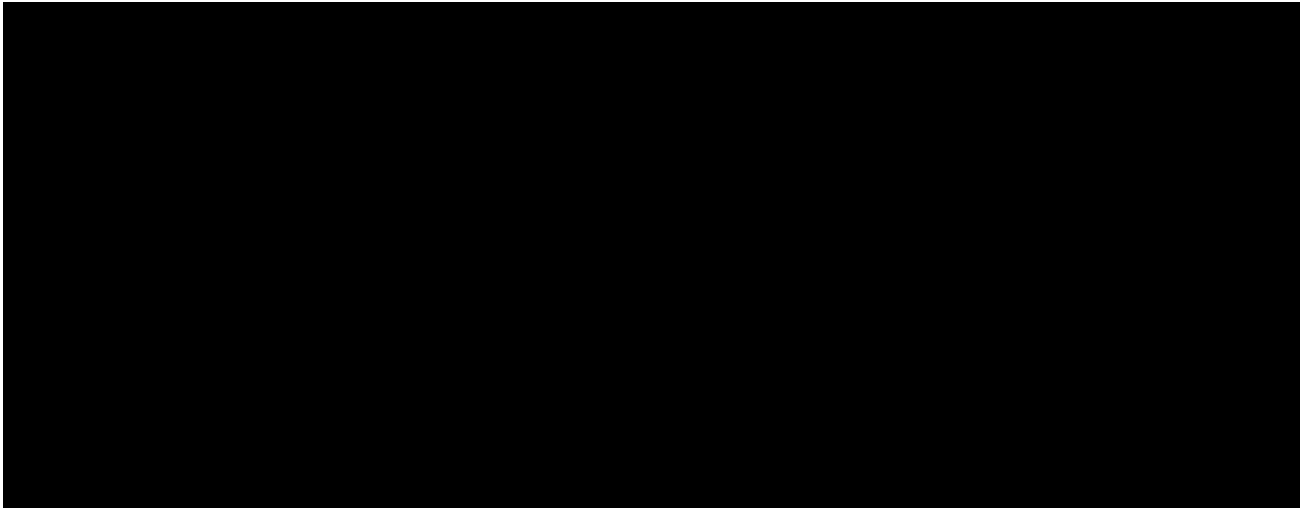
- (27) My proposal in the Marx Remand WDT worked with the results from the Majority’s model and addressed this problem (described there as the “imbalance” problem) by having musical works rights holders and Services each get an equal share of their “fair” allocation, taking as given the supracompetitive rates of the record labels.<sup>35</sup> In essence, this approach shares the burden of the record labels’ market power between the Services and the Copyright Owners in proportion to their fair shares, rather than imposing it all on the Services as the Majority’s model did.
- (28) By leaving the Services with just their survival rate, the rate-setting algorithm in the Working Proposal suffers from the same imbalance problem. Rather than attempt to appropriately reward both the Services and the musical works rightsholders, it places all of the burden of label market power on the Services.
- (29) In Figure 3, I correct the numbers in Figure 2 for the imbalance problem.<sup>36</sup> This correction holds sound recording royalties constant, rather than assuming that total royalties will remain constant, which means that I can focus on the two unique values of sound recording royalties from Figure 2: █% and █%. These result in all-in musical works rates of █% and █%, respectively. Because these rates give the musical works rights holders and Services the same portion of the “fair” outcome as previously determined by the Majority, they are more in line with the 801(b)(1) factors.

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<sup>35</sup> Marx WRDT, § VI.B.

<sup>36</sup> I focus on the rows in Figure 2 that provide a value for sound recording royalties, so that the correction is possible.

Figure 3. [RESTRICTED] Rates from Figure 2 corrected for the imbalance problem



### **V.B. Alternative 2: using a real-world ratio and adjusting for market power**

- (30) The December 9, 2021 Order states that “the Judges might determine that the appropriate method and formula for setting an ‘effectively competitive,’ ‘reasonable’ and/or ‘fair’ mechanical royalty” is to use the rate-setting algorithm from the Working Proposal.<sup>37</sup> If the Judges are attempting to calculate an effectively competitive royalty rate, then the rate-setting algorithm in the Working Proposal cannot be used without adjustment. That algorithm assumes that the major labels will use their complementary oligopoly power to dictate the amount that the services will retain and leave them with just enough to survive. While it is difficult to see how such an approach can be squared with notions of effective competition—which generally reference markets in which no firm has substantial market power—modifications can be made to the Working Proposal so that it produces rates that better reflect effective competition.

<sup>37</sup> December 9, 2021 Order at 3, noting that the formula they provide might be “the appropriate method and formula for setting an ‘effectively competitive,’ ‘reasonable’ and/or ‘fair’ mechanical royalty.”

- (31) For the Working Proposal to yield rates that come closer to being effectively competitive, two changes should be made. First, the market sound recording rate should be reduced to mitigate the effect of the major labels’ complementary oligopoly power, for example by applying an “effective competition” adjustment using a similar approach taken by the Judges in Web IV and Web V.<sup>38</sup> Second, the 3.82-to-1 ratio used to divide royalties between the sound recording and musical works rightsholders in the Working Proposal should be replaced with a real-world ratio in which both the numerator and the denominator contain rates that are intended to approximate those that would emerge in an effectively competitive market.
- (32) To address the first issue, the Judges in Web IV and Web V made a downward adjustment of █ % to the interactive streaming sound recording rates to convert those rates to effectively competitive rates.<sup>39</sup> █  
 █<sup>40</sup>
- (33) To address the second issue, the Judges can look to other ratios in the record. For example, the Judges have previously found a sound recording to musical works royalty ratio based on the noninteractive streaming rates paid by Pandora to be a “useful benchmark” for interactive streaming royalties.<sup>41</sup>

<sup>38</sup> Determination, *In re: Determination of Royalty Rates and Terms for Ephemeral Recording and Webcasting Digital Performance of Sound Recordings (Web IV)*, Docket No. 14-CRB-0001-WR (2016-2020) [hereinafter, “Web V”], at 64–65 (“Thus, the rate . . . should be adjusted to reflect such price competition, so that it is usable as an ‘effectively competitive’ rate . . .”); Web V, at 66 (“[T]he Judges find that the █ % effective competition adjustment that they set in *Web IV* remains an appropriate measure for an effective competition adjustment . . .”).

<sup>39</sup> “[T]he Judges find that the █ % effective competition adjustment that they set in *Web IV* remains an appropriate measure for an effective competition adjustment . . .” Web V, at 66.

<sup>40</sup> “█  
 █” Web V, at 72.

<sup>41</sup> Phonorecords III Final Determination, at 51 (“The Judges agree with Dr. Eisenach that the Pandora “Opt-Out” agreements are useful benchmarks. These agreements have the level of comparability necessary for a benchmark to be useful. However, the Judges do not agree with Dr. Eisenach’s attempt to extrapolate from the actual rates in those Opt-Out Agreements. Rather, the Judges find that the █ ratio Dr. Eisenach identified for the year 2018 in existing

Written Second Supplemental Remand Testimony of Leslie M. Marx, PhD, Docket No. 16-CRB-0003-PR (2018–2022) (Remand)

- (34) The non-interactive streaming sound recording to musical works ratio is particularly informative for setting an effectively competitive rate because both the numerator rate and the denominator rate are constrained by regulatory bodies charged with setting effectively competitive rates. Sound recording rates in the noninteractive streaming market are set by the CRB under the willing buyer/willing seller standard.<sup>42</sup> In both Web IV and Web V, the Judges concluded that the willing buyer/willing seller standard calls for effectively competitive rates.<sup>43</sup> In the denominator, the bulk of the musical works royalties for non-interactive streaming services are determined in negotiations with ASCAP and BMI, with a “rate court” that is charged with determining “reasonable” competitive rates providing oversight.<sup>44</sup>
- (35) The Phonorecords III Final Determination found the ratio of sound recording to musical works royalties for Pandora’s non-interactive streaming service to be [REDACTED]<sup>45</sup> Applying this ratio to the interactive service sound recording rate, after making the market power adjustment to observed sound recording rates, is one way to work within the framework adopted by the Judges in the December 9, 2021 Order, and arrive at rates that are closer to effectively competitive rates.<sup>46</sup>

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agreements is the most useful benchmark derived from the “Opt-Out” data”).

<sup>42</sup> See Web V, at 2 (“The Act requires that the Judges ‘establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller.’”).

<sup>43</sup> See Web V, at 6–7 (“In *Web IV*, the Judges held that the Copyright Act either required them, or permitted them, in their discretion, ‘to set a rate that reflects a market that is *effectively competitive*.’ . . . More particularly, the D.C. Circuit found reasonable the Judges’ construction of the statutory ‘willing seller/willing buyer-marketplace’ standard as calling for the establishment of rates that would have been set in an effectively competitive market. . . . Consistent with the D.C. Circuit’s decision affirming *Web IV*, the Judges in this *Web V* proceeding again apply the standard that royalty rates for noninteractive services should be set at levels that reflect those that would be set in an effectively competitive market.”).

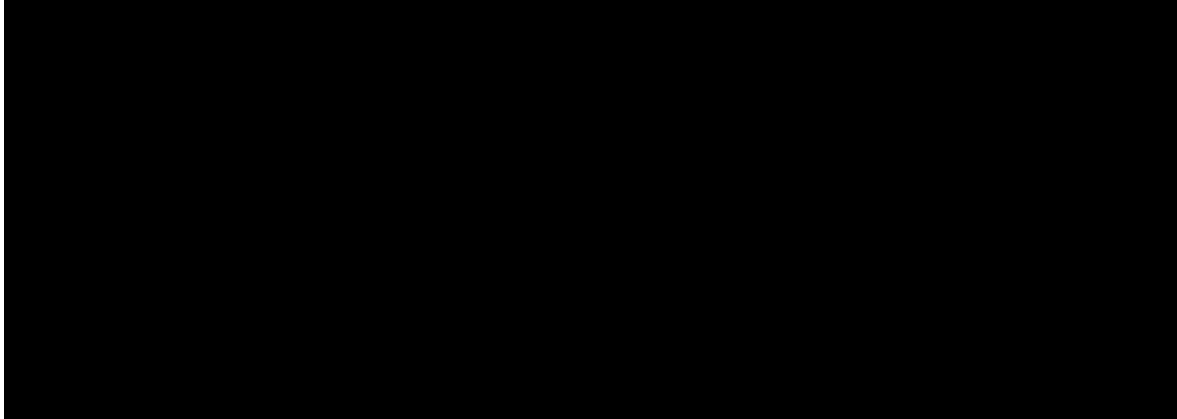
<sup>44</sup> See *United States v. ASCAP (In re Application of RealNetworks, Inc.)*, 627 F.3d 64, 76 (2d Cir. 2010) (“Fundamental to the concept of ‘reasonableness’ is a determination of what an applicant would pay in a competitive market. . . .”). See also *United States v. ASCAP (In re Application of Buffalo Broad. Co., Inc.)*, No. 13-95 (WCC), 1993 WL 60687, at \*16 (S.D.N.Y. Mar. 1, 1993) (“[T]he rate court must concern itself principally with ‘defin[ing] a rate . . . that approximates the rates that would be set in a competitive market.’”).

<sup>45</sup> Phonorecords III Final Determination, at 51.

<sup>46</sup> Alternatively, one could also look to the sound recording to musical works ratio deriving from the settlement between Written Second Supplemental Remand Testimony of Leslie M. Marx, PhD, Docket No. 16-CRB-0003-PR (2018–2022) (Remand)

- (36) Figure 4 applies these two adjustments to the measures of [REDACTED] sound recording rates from Figure 2 to arrive at all-in musical works rates.<sup>47</sup> This yields an all-in musical works royalty rate range of [REDACTED].<sup>48</sup>

**Figure 4. [RESTRICED] Calculating effectively competitive rates based on non-interactive ratio approach**



## VI. Judges' proposed rate structure

- (37) The Judges also ask for feedback on their proposed rate structure, which removes the total content cost ("TCC") rate prong but keeps a percentage of revenue headline rate with a mechanical-only per-subscriber minimum as a backstop for certain offerings.<sup>49</sup>
- (38) I agree with the general idea articulated by the Judges that multiple backstops are not required to protect from revenue deferral or diminution concerns. For paid subscription services (including individual plans, family plans, student plans, and bundles), the

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the Copyright Owners and the record labels for the mechanical rates paid by digital downloads. The settlement in the *Phonorecords IV* proceeding, which was the same as the settlement from the *Phonorecords III* proceeding, was against the backdrop of a proceeding that uses the willing buyer/willing seller standard that calls for effectively competitive rates. In the *Phonorecords III* Final Determination, the Judges, citing Dr. Leonard, noted that the musical works royalties from this settlement can be expressed as a percentage of sound recording royalties. That percentage was [REDACTED]%, implying a sound recording to musical works ratio of approximately [REDACTED]. *Phonorecords III* Final Determination, at 61.

<sup>47</sup> I focus on the rows in Figure 2 that provide a value for sound recording royalties, so that the calculation is possible.

<sup>48</sup> Using the [REDACTED] ratio of sound recording to musical works royalties from the digital download settlement would yield musical works rates that are even lower than those contained in Figure 4.

<sup>49</sup> December 9, 2021 Order at 1, 4; January 6, 2022 Order at 13.

mechanical-only per-subscriber minimum acts as a backstop against these concerns. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]<sup>50</sup> [REDACTED]

[REDACTED] Further, in light of the largely historical-looking nature of this proceeding, which means that revenues for the relevant period have largely already been recorded, any incentive effects associated with having a TCC rate prong are largely irrelevant.<sup>51</sup>

- (39) In addition to a TCC rate prong not being necessary, such a prong has distinct drawbacks relative to other potential rate backstops. It is well recognized that sound recording royalties are inflated by the excess market power of the record labels.<sup>52</sup> A TCC rate prong risks importing that excess market power into musical works royalties and renders musical works rates subject to developments in the record label market that are unrelated to the relative contributions of the Copyright Owners and Services. The drawbacks of a TCC rate prong can

<sup>50</sup> See, e.g., [REDACTED]

<sup>51</sup> A backstop such as a TCC rate prong can make a strategy of deliberate manipulation of revenue to achieve lower royalty costs less profitable, but the existence of that prong during most of the Phonorecords III period has already had whatever impact on incentives that it is going to have, whether or not it is ultimately retained retroactively in this proceeding.

<sup>52</sup> See, e.g., Phonorecords III Final Determination, at 47 (“The Judges explained at length in *Web IV* how the complementary oligopoly nature of the sound recording market compromises the value of rates set therein as useful benchmarks for an “effectively competitive” market.”). See also Dissenting Opinion of Judge David R. Strickler, *In re: Determination of Royalty Rates and Terms for Making and Distributing Phonorecords (Phonorecords III)*, Docket No. 16-CRB-0003-PR (2018-2022) (CRB, November 5, 2018), at 3 (“However, it is undisputed that the record companies, by statutory design, have the unfettered legal ability to set their sound recording royalty rates, allowing them to exercise their complementary economic power to demand rates that embody their ‘complementary oligopoly’ status, as previously described by the Judges.”).

be mitigated by a cap on the TCC rate prong (assuming it is set correctly). That approach was used in the Phonorecords II settlement. But those concerns are removed entirely with the elimination of the TCC prong.

Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress

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In the Matter of

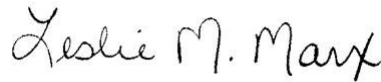
**DETERMINATION OF RATES AND  
TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(PHONORECORDS III)**

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)  
) **Docket No. 16–CRB–0003–PR (2018–  
) 2022) (Remand)**  
)  
)  
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**DECLARATION OF LESLIE M. MARX**

I, Leslie M. Marx, declare under penalty of perjury that the statements contained in my Written Second Supplemental Remand Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information, and belief. Executed this 24th day of January 2022 in Durham, North Carolina.



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Leslie M. Marx



PUBLIC

Before the  
UNITED STATES COPYRIGHT ROYALTY JUDGES  
The Library of Congress  
Washington, D.C.

*In re*

**DETERMINATION OF ROYALTY RATES AND  
TERMS FOR MAKING AND DISTRIBUTING  
PHONORECORDS (Phonorecords III)**

**Docket No. 16–CRB–0003–PR  
(2018–2022) (Remand)**

**Exhibit Index**

<b>Exhibit No.</b>	<b>Bates No.</b>	<b>Sponsoring Witness</b>	<b>Description</b>
Spot. Rem. Ex. 1	SPOTRMND0000098	Leslie M. Marx	[REDACTED]
Spot. Rem. Ex. 2	SPOTRMND0000001	Leslie M. Marx	[REDACTED]
Spot. Rem. Ex. 3	SPOTRMND0000322	Leslie M. Marx	[REDACTED]

SPOT. REM. EX. 1  
Restricted

SPOT. REM. EX. 2  
Restricted

SPOT. REM. EX. 3  
Restricted

Before the  
COPYRIGHT ROYALTY BOARD  
LIBRARY OF CONGRESS  
Washington, D.C.

In the Matter of:

DETERMINATION OF RATES AND  
TERMS FOR MAKING AND  
DISTRIBUTING PHONORECORDS  
(PHONORECORDS III)

Docket No. 16–CRB–0003–PR (2018–2022)  
(Remand)

**DECLARATION AND CERTIFICATION OF MARGARET L. WHEELER-  
FROTHINGHAM REGARDING RESTRICTED MATERIAL**

**(On behalf of Spotify USA Inc.)**

1. I am counsel for Spotify USA Inc. (“Spotify”) in the above-captioned proceeding. I respectfully submit this declaration and certification pursuant to the terms of the Protective Order issued July 27, 2016 (the “Protective Order”) and in support of the Written Second Supplemental Remand Testimony of Leslie M. Marx, PhD and Exhibits Spot. Rem. Exs. 1-3 thereto. I am authorized by Spotify to submit this declaration on Spotify’s behalf.

2. I have reviewed the Written Second Supplemental Remand Testimony of Leslie M. Marx, PhD (the “Second Supplemental Marx Testimony”) and Exhibits Spot. Rem. Exs. 1-3 thereto (the “Exhibits”). I have also reviewed the definitions and terms provided in the Protective Order. After consultation with my client, I have determined to the best of my knowledge, information and belief that portions of the Second Supplemental Marx Testimony and the entirety of the Exhibits contain information that Spotify has designated as “confidential information” as defined by the Protective Order (“Protected Material”). The Protected Material is shaded in grey highlight in the restricted filings of the Second Supplemental Marx Testimony and is fully redacted in the public e-filing of Second Supplemental Marx Testimony, and is

described in more detail below. The Exhibits are filed as “Restricted” and the public versions of the Exhibits contain slip-sheets only.

3. The Protected Material includes, but is not limited to, testimony or analysis involving (a) contracts and contractual terms (including the negotiation thereof) that are not available to the public, highly competitively sensitive and, at times, subject to express confidentiality provisions with third parties; and (b) highly confidential internal business information, financial projections, financial data, negotiation correspondence, and competitive strategies that are proprietary, not available to the public, and commercially sensitive.

4. If this contractual, strategic, and financial information were to become public, it would place Spotify at a commercial and competitive disadvantage, unfairly advantage other parties to the detriment of Spotify, and jeopardize Spotify’s business interests. Information related to confidential contracts or relationships with third-party content providers could be used by Spotify’s competitors, or by other content providers, to formulate rival bids, bid up Spotify’s payments, or otherwise unfairly jeopardize Spotify’s commercial and competitive interests.

5. The contractual, commercial, and financial information described in the paragraphs above must be treated as Restricted Protected Material in order to prevent business and competitive harm that would result from the disclosure of such information while, at the same time, enabling Spotify to provide the Copyright Royalty Judges with the most complete record possible on which to base their determination in this proceeding.

Pursuant to 28 U.S.C. § 1746, I hereby declare under penalty of perjury that, to the best of my knowledge, information, and belief, the foregoing is true and correct.

Dated: January 24, 2022

/s/ Margaret L. Wheeler-Frothingham

Margaret L. Wheeler-Frothingham  
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*Counsel for Spotify USA Inc.*

# Proof of Delivery

I hereby certify that on Monday, January 24, 2022, I provided a true and correct copy of the Written Second Supplemental Remand Testimony of Leslie M. Marx, Phd to the following:

Nashville Songwriters Association International, represented by Benjamin K Semel, served via ESERVICE at Bsemel@pryorcashman.com

Johnson, George, represented by George D Johnson, served via ESERVICE at george@georgejohnson.com

Google LLC, represented by David P Mattern, served via ESERVICE at dmattern@kslaw.com

Amazon.com Services LLC, represented by Scott Angstreich, served via ESERVICE at sangstreich@kellogghansen.com

Pandora Media, LLC, represented by Benjamin E. Marks, served via ESERVICE at benjamin.marks@weil.com

National Music Publishers' Association (NMPA) et al, represented by Benjamin Semel, served via ESERVICE at Bsemel@pryorcashman.com

Signed: /s/ Richard M Assmus